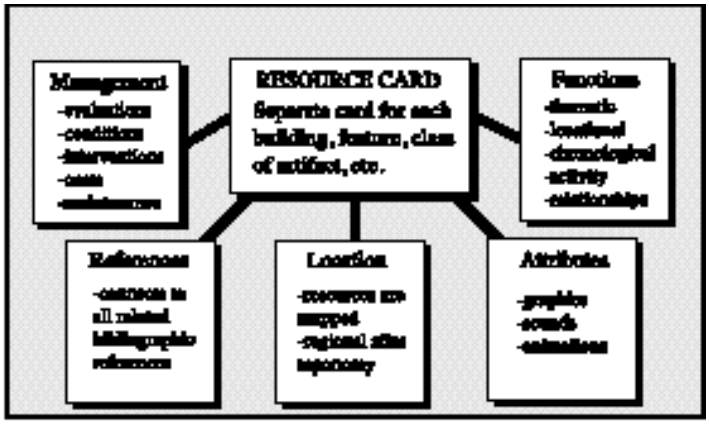
Gary Adams

A New Tool for Cultural Resource Management



Some tools available for a specific resource.

In 1995, a new interactive management tool for cultural resources was delivered to the Manitoba North National Historic Sites. The delivery of that tool from the regional archaeologists was the culmination of a long process of interaction between site operational staff and regional experts all of whom had a single objective—to more effectively protect and present the cultural resources of a National Historic Site. The project started over a year earlier when the superintendent came to archaeologists at the Regional Service Centre with a specific problem. She needed an on-site inventory of the cultural resources related to York Factory to record their evaluation and to track both decisions on, and the activities related to, cultural resources on the site. In subsequent meetings between Site staff and the project team, an additional goal was added to make this inventory useful in the development of presentation programming. What makes this whole process noteworthy, is the complexity of the issues and the novelty of the solution.

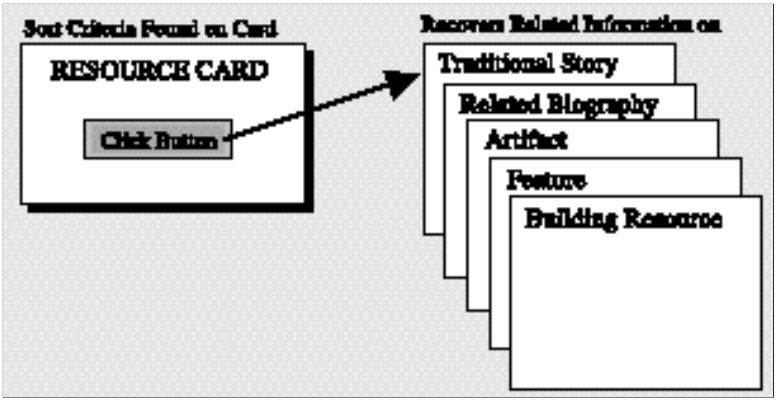
As a National Historic Site, York Factory carries several intrinsic issues. Although only one major building survives, dating to the 1830s, the actual historic site contains the well-preserved, historic remains of more than 100 structures, dating back to 1789. Along the lower portion of the Hayes River, upon which the site faces, and the adjacent Nelson River, there are remains of additional fur trade sites and resources. As a block, they represent the core history of the Hudson Bay Company and exploration of Western Canada back to its beginnings in the early 1600s. However rich and significant the resources, the site is currently isolated in the sub-arctic Hudson's Bay Lowlands. The nearest communities are over 150 km away and accessible only by air or boat. This makes the site's cultural resources very difficult to manage.

The site is also one of the best documented in the entire Parks Canada network. There are tens of thousands of pages of archival material directly related to the site, numerous historical treatments, seven seasons of archaeological research, and over 200,000 artifacts. The issue for park interpretation staff is most often one of just where they start looking.

The numerous resources that needed tracking was the primary concern of the park superintendent. She wanted to have a system that would allow her to record the heritage values, threats, and interventions to the various *in situ* resources. It was important to her to know who did what to the resources over a period of time. The interpretation staff were looking for a solution to a different problem. They had to interpret the site and create programs for it in Churchill, 200 km to the north. They did not have the benefit of being able to use the site's *in situ* resources directly. With the wealth of information available, they needed mechanisms to sift through massive amounts of data; relate it to resources that were not on hand; and deliver messages to the public.

The final product, *A York Factory CRM Toolkit*, was developed to provide solutions to all of these problems. It emerged as a Hypercard™ stack on a Macintosh Computer. The heart of the project is a database of more than 1500 cultural resources representing buildings, archaeological sites, archaeological features, and artifacts from the site and its immediate environs. Each resource is accompanied by basic information and a brief description that might include its history, importance to the site or role in a broader perspective. What was avoided was the dry, formal descriptions that archaeologists tend to rely on. For buildings and features, each resource is handled as a separate entity while artifacts have been combined into a generic typology. In this way, all horseshoes, hammers, and hasps are treated as single entities.

The cultural resources are further supplemented by a series of over 500 information records that identify heritage values for the resources. Separate information sets are available for historical, ethnographic, topographical, traditional knowledge and ecological information. The key criterion for selecting which additional information to incorporate in the *Toolkit* was that it complement the actual resource data and could be



Cultural resource sorting technique.

linked directly to a resource. In this way, a traditional story about weddings at York Factory would be connected to the church feature.

The special capabilities of Hypercard™ were exploited to take this basic information farther than a basic database could handle. The resources were divided into several groupings that reflected the geographic and historic development of the site. This allowed the developers to display each grouping on a site map. Little complementary features were developed to further enhance the information or clarify issues. There is a small historical atlas that relates the site to the long-term ecological and cultural history of the region. An animation demonstrates the monumental effects of the riverbank erosion that has wiped out over 100 years of historical resources. Another sequence shows how various features from differing occupations are superimposed. There are illustrations of more than 100 resources, a complete interactive bibliography of references, and smaller, complementary stacks to provide detailed information.

All of this information is only as good as it is useful. As a management *Toolkit* to implement Parks Canada's Cultural Resource Management Policy, several special features are installed. The click of a button on any cultural resource will provide a management card for it. This card indicates the heritage, a history of interventions and a description of its condition and the nature of any threats to it. Site managers can also define five additional text fields to track their own issues and information. There is also a process involved to help the site determine the level of significance of the resource as defined by the policy. Each resource can be evaluated within the policy, using on line aids such as site commemoration statements, site themes and sub-themes, and related information to refine its values.

The tools provided for the interpretation of the resources are of a different nature. While the massive amounts of information and the extensive bibliography are important in their own right, the site staff wanted this program to be the first line of inquiry when answering questions of the public or developing an interpretive program. Added devices to help them were: attached pictures and photographs of artifacts and buildings; a comment field on every record; lists of artifact catalogue numbers for pre-selected displayable specimens; and a series of individual notepads that could be generated for each person and/or project. To help the user work with the data, each record has a blank field to keep additional notes and there are menu-driven sort, find, and "bookmark" functions. All of this is explained in an on-line help stack.

The most valuable innovation was a sorting and selecting mechanism that allowed someone to call up all of the resources and related information by special topic. To the best of our knowledge, this is the first database in Parks Canada that lets site staff access information on such disparate resources as archaeological artifacts, landscape features and historic buildings with a single search. Four sets of topics were discussed and incorporated into this product as menu-driven searches for use by the park staff. The first of these is the locational, breaking entire site into small segments on a map. Clicking on any portion of the map will assemble all of its resources. Among the uses for this is a mechanism to evaluate cultural resources in an environmental impact assessment. The second grouping activates on the themes and sub-themes of the site. Clicking on any sub-theme will generate a subset of all its related resources. The third set is a chronological sequence that divides the 300 years of occupation by the Hudson's Bay Company into logical chunks based on significant events in the site's history. The final set associates activities. Here, the archaeologists who compiled the information were on familiar ground, using activities to define patterns of representation. Additional topic areas can be custom designed, based on key words so a program developer can design a presentation around any desired topic and instantly assemble a list of all related resources whether they are on site, in storage, or in the hands of another agency.

Both the site and service centre staff are pleased with the product as it exists but its true potential lies in the flexible nature of the HyperCard™ style of program. It is very easy to add to any part of it or to attach new components. It is customized around a specific site, but can be easily modified to accommodate any site or to add others. New modules are being planned and some of the original components have already been upgraded.

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